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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,638	11/18/2003	Dan Forsberg	0172.42240X00	3251
20457	7590	05/12/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			NOBAHAR, ABDULHAKIM	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/714,638

Applicant(s)

FORSBERG, DAN

Examiner

Abdulahakim Nobahar

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. This communication is in response to applicants' amendment received on February 28, 2005.
2. Applicants' arguments have been fully considered but they are not persuasive.
3. Applicants on page 4 of the remarks argue that "each of the independent claims 1, 31 and 40 substantively recites establishing a secure tunnel which provides connection between the user equipment and one of the network entities and authenticating the user equipment with another of the network entities which occurs at least partially simultaneously with the establishing of the secure tunnel. This subject matter has no counterpart in Zhang et al." and on page 5 of the remarks argue that "The IPSEC protocol is described as performing encryption between the mobile terminal 110 and only the wireless access point 120 which cannot anticipate the claimed different network entities which are involved with tunneling and authentication."

In response to above applicant's argument, it is noted that Zhang discloses a secure communication system between a mobile terminal (MT) and network server over an insecure network infrastructure that uses IPSEC protocol (a leading tunnel protocol) to establish a secure channel (i.e., a secure tunnel) (see Fig. 1; [0029]; [0043]; [0045]; [0058]). Zhang discloses a server at an access point for secure communication with the MT and an authentication server, which is a different entity from the access server for

the purpose of authenticating MT (see [0073]). Zhang further discloses that MT starts encrypting operation (i.e., establishing a tunnel using IPSEC) at step 6 of the authentication process (see [0074]-[0082]). This means that portion of the authentication process occurs while a secure channel between an MT and an access server is established (i.e., partially simultaneously).

4. In light of the above submission the previous claim rejection under 35 USC § 102 is maintained.

#### **DETAILED ACTION**

##### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al (2002/0174335 A1).

Regarding claims 1-3, 6-8, 31-33, 36 and 40-42, Zhang discloses a method for providing authentication, authorization and accounting (AAA) transactions in a wireless

network (see, for example, abstract and [0028]). Zhang discloses that a mobile terminal (MT) receives services from an Internet service provider (ISP) having an authentication server through an access point (AP) (corresponding to the recited access network) with a server (see, for example, Fig. 1 and [0073]). Zhang also discloses that a secure channel (i.e., secure tunnel) is established between the MT and the AP (see, for example, [0025], [0026], [0043] and [0045]). Zhang further discloses that in one embodiment IPSEC is used for per-packet encryption between a MT and an AP (see, for example, [0029], [0067] and [0068]). In this embodiment every packet is encrypted and authenticated. As Fig. 2 and the procedure explained at [0073] through [0082] demonstrate that all transmitted messages are encrypted (corresponding to the recited establishing of the secure tunnel) while (corresponding to the recited at least partially simultaneous) authentication of a MT is being performed. This means that authentication process starts right after a secure channel is established.

Regarding claims 4-5, 34-35, 39, 43-44 and 48, Zhang discloses that the preferred embodiment of his invention provides a mechanism to prevent a denial of service attack by a hacker during the authentication of a user after establishing a secure channel. This is done by APs making intelligent decision while relaying user authentication certificate (corresponding to the recited a request for an identification of the user equipment). Zhang also discloses that IPSEC is used for the communication between the user and AP to ensure data integrity (corresponding to the recited a

request for capability of the user equipment to support at least one data protocol) (see, for example, [0065]-[0067]).

Regarding claims 9-10 and 45, Zhang discloses that both the AP and the service provider (i.e., an ISP) each include a server in their networks (see, for example, [0055] and [0073]).

Regarding claims 11-20, 37 and 46, Zhang discloses that the messages transmitted between a mobile user and an AP network are encrypted (corresponding to the recited the secure tunnel is established) and the communication is performed between the mobile user equipment and a server that is included in the AP network (see, for example, [0045], [0073] and Fig. 2, NASP).

Regarding claims 21-23, 26-27, 38 and 47, Zhang discloses that a mobile user connection with an AP network is a wireless connection (see, for example, [0055]).

Regarding claims 24-25, these claims are rejected as applied to the like elements of claims 4 and 5 as stated above.

Regarding claims 28-30, Zhang discloses that a roaming user accesses an ISP or a home network through a local network (i.e., an access or visited network) see, for example, [0047], [0051] and [0060]).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdulhakim Nobahar whose telephone number is 571-272-3808. The examiner can normally be reached on M-T 8-6.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AN *a.n.*

May 9, 2005

Abdulahkim Nobahar  
Examiner  
Art Unit 2132

  
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